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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/711,238

09/03/2004

Jonathan D. Albert

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26245

7590

09/06/2006

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EXAMINER

LIANG, REGINA

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/711,238	ALBERT ET AL.	
	Examiner	Art Unit	
	Regina Liang	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to amendment filed 7/21/06. Claims 1-20 are currently pending in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 19 recites the limitation "the at least one rear electrode" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6, 10, 12, 14, 16, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greanias et al (US 5,386,219 hereinafter Greanias) in view of Blanchard (US 4,893,115).

As to claim 1, Figs. 5-8 of Greanias discloses an electrically active display comprising an optoelectrically active display medium (LCD 18) having a surface (the top surface of LCD 18 corresponds to a second surface of the display medium), an adhesive layer (99) disposed on the surface of the display medium (18), the surface of the adhesive remote from the display medium

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forming an external surface of the display, so that the display can be attached to a receiving surface (lower substrate 90 of the overlay 16) by the adhesive layer (99).

Greanias does not explicitly disclose the display medium (LCD 18) having a first surface and an electrode in contact with the first surface of the display medium. However, it is well known in the art that a LCD display medium (LCD 32 in Fig. 4 of Blanchard) having a first surface (lower surface of 43) and a second surface (top surface of 43), and an optically transmissive electrode (50) in contact with the first surface. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display medium of Greanias having a first surface and an electrode in contact with the first surface as taught by Blanchard so as to provide a displayed picture (pixels) on the LCD display medium.

As to claim 10, note the discussion of claim 1 above. Greanias as modified by Blanchard teaches the process for forming the display as claimed. Furthermore, Greanias teaches the receiving surface comprising at least one electrode (91 in Fig. 5 for example).

As to claims 2, 12, Fig. 4 of Blanchard teaches the display comprising an optically transmissive layer (51) on the opposed side of the electrode from the display medium.

As to claims 3, 4, Blanchard teaches the electrode comprising ITO (col. 7, lines 66-68).

As to claims 6, 14, Blanchard teaches the display medium comprising an electrophoretic medium (col. 6, lines 53-62).

As to claim 16, Blanchard teaches the display medium having a rear electrode (46) disposed between the display medium (43) and the second surface of the display medium (33).

As to claims 18, 20, note the discussion of claim 1 above. Greanias teaches an adhesive layer disposed on the second surface of the display medium, and Blanchard teaches at least one

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second electrode (46) disposed between the display medium (43) and the second surface (47).

Thus, Greanias as modified by Blanchard would have the second electrode disposed between the display medium and the adhesive layer as claimed.

6. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greanias and Blanchard as applied to claims 1 and 10 above, and further in view of Richley (US 5,900,858).

Blanchard teaches the display medium comprising electrochromic or electrophoretic display. Greanias as modified by Blanchard does not disclose the display medium comprising bichromal micropheres. However, Richley teaches twisting ball panel display which utilizes a plurality of bichromal ball. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display medium of Greanias as modified by Blanchard to have bichromal micropheres as taught by Richley so as to provide a flexible display which has memory capabilities (col. 1, lines 12-17 of Richley).

7. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greanias and Blanchard as applied to claims 1 and 10 above, and further in view of Sheridan (US 4,126,854).

Blanchard teaches the display medium comprising electrochromic or electrophoretic display. Greanias as modified by Blanchard does not disclose the display medium comprising encapsulated electrophoretic medium. However, Sheridan teaches an electrophoretic display medium comprising an encapsulated electrophoretic medium (col. 2, lines 22-25). Thus it would

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have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display medium of Greanias as modified by Blanchard to have an encapsulated electrophoretic display as taught by Sheridan so as to provide a flexible display which has memory capabilities (last two lines in the abstract of Sheridan).

8. Claims 8, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greanias and Blanchard as applied to claims 1 and 10 above, and further in view of Brody (US 6,285,343).

As to claims 8, 11, Greanias as modified by Blanchard does not disclose at least one conductive extending from the electrode through the display medium. However, Brody teaches a display device having an extending electrode (interconnecting conductor 30 in Fig. 4a) extending from one side of the display to an opposite side of the display through the display medium for electrically connecting the electrodes on one side of the display with the drive circuit on opposite side of the display. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display system of Greanias as modified by Blanchard to have an interconnecting conductor as taught by Brody such that electrically connecting the drive circuit adjacent the second surface with the electrode along the first surface.

As to claim 9, Fig. 4C of Brody teaches at least one contact pad (19) connected to the connecting conductor 30.

9. Claims 1, 16, 17, 10, 18, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara et al (US 5,065,505 hereinafter Matsubara) in view of Iwashita et al (US 4,715,686 hereinafter Iwashita).

As to claims 1, 16, 18, Fig. 1 of Matsubara discloses an electrically active display comprising an optoelectrically active display medium (LCD) having a surface (the top surface of LCD corresponds to a second surface of the display medium), an adhesive layer (5, 8a) disposed on the surface of the display medium, at least one electrode (7) disposed between the display medium and the adhesive layer.

Matsubara does not explicitly disclose the display medium (LCD) having a first surface and an electrode in contact with the first surface of the display medium. However, Fig. 1 of Iwashita teaches a LCD display (3, 11) having a first surface (lower surface of 4) and a second surface (top surface of 4), and an optically transmissive electrode (3) in contact with the first surface. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display medium of Matsubara having a first surface and an electrode in contact with the first surface as taught by Iwashita so as to provide a display picture (pixels) on the LCD display medium.

As to claims 17, 19, Matsubara teaches the at least the portion of the adhesive layer (5, 8a) covering the at least one electrode (7) is conductive (col. 3, lines 17-19).

As to claims 10, 20, note the discussion of claims 1 and 18 above. Matsubara as modified by Iwashita teaches the process for forming the display as claimed.

Response to Arguments

10. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

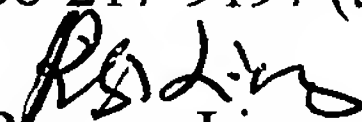
11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Regina Liang
Primary Examiner
Art Unit 2674

9/1/06